

August 6, 1962

SPECIAL HANDLINGEXHIBIT "A"
CONTRACT NO. BT-1943

- A. Contractor shall furnish the necessary facilities, materials, and services to accomplish the Statement of Work set forth below and make delivery to the Government at the times and places specified herein below:

STATEMENT OF WORK

Item 1 - Design, develop, and fabricate five (5) each Panoramic Camera Subsystems incorporating the five (5) GFE Stellar Index Cameras in accordance with Contractor's Specification No. 43961, dated 19 June 1962, including the supplement attached thereto, said documents being incorporated by reference, together with such changes as may be agreed to between the Contractor and the Contracting Officer.

Item 2 - Provide mock-ups of the subsystems as follows:

- a. One (1) each space mock-up which simulates the outer configuration only for use by LMSC.
- b. One (1) each structural mock-up which is weight and mass simulation of the system for use by LMSC.

Item 3 - Contractor shall furnish the following GHE and GSE:

- a. Modify 2 each GF (Gov't. Furnished) 2 Bay Checkout Consoles.
- b. Modify 2 each GF 3 Bay Checkout Consoles.
- c. Modify 2 each GF Instrumentation Consoles.
- d. Design & fabricate 2 each Instrumentation Consoles.
- e. Design & fabricate 2 each 2 Bay Checkout Consoles.
- f. Design & fabricate 1 each 3 Bay Checkout Console.
- g. Design & fabricate 3 each Test and Integration Dollies.
- h. Design & fabricate 1 each STM (Structural Test Model) dolly.
- i. Design & fabricate 2 each interface templates.
- j. Design & fabricate 5 each "Strong Backs."
- k. Design & fabricate 3 each Pan transit cases.
- l. Fabricate 7 each Cassette transit cases.
- m. Modify the design and supply 78 sets each film transit case spiders and protective flanges.
- n. Design & fabricate 3 sets vertical installation sling assemblies.

SPECIAL HANDLING

SPECIAL HANDLING

August 6, 1962

Page 2

- Item 4 - Provide LMSC with two (2) additional subsystem cassette assemblies for test and checkout purposes.
- Item 5 - Furnish 83 film support spools for the camera subsystem. Delivery shall be made in accordance with the Film/Spool/Transit Case schedule developed by the Contractor. Contractor shall provide protective flanges for the GFE transit cases.
- Item 6 - Furnish necessary field engineering services to support the subsystems at LMSC and VAFB in accordance with Detailed Field Engineering and Flight Support Work Statement, dated 14 May 1962.
- Item 7 - Contractor shall furnish spares in accordance with the following:
- a. On or before 15 August 1962, Boston shall furnish SE seven (7) copies of a production list containing the part number, description, and quantity of those parts deemed necessary by Boston to support the equipments after shipment from Boston, considering the delivery schedule and two facilities. This list shall indicate those long-lead-time items already released to support the equipments.
 - b. If within thirty (30) days from the date of submission, the SE and the Customer has neither approved or disapproved all the items contained in such production lists, those items shall be deemed to have been authorized for provisioning purposes. In the event items are disapproved by the Customer, procurement activity shall be terminated where necessary.
 - c. Spares shall be shipped to the Associate, F.O.B. the Associate's facility for maintenance of accountability in a segregated Stores Area. The parts shall be available to Boston's Field Engineering and Flight Support Group to replace those parts as may be necessary to certify flight readiness of the camera subsystems.
 - d. The cost, fixed-fee, and delivery schedule of these spares shall be determined at a later date.
- Item 8 - Contractor shall perform Inspection, Qualification and Acceptance tests in accordance with Specification No. 43961 and the following:
- a. Inspection of the material to be delivered from Boston shall be at a level deemed necessary by Boston and approved by the Government to insure performance. Boston shall provide additional inspection services in the event performance verification or rework is necessary to such material after acceptance and delivery. Boston shall also verify that no damage in transit has occurred to its materials after shipment from one facility to another.
 - b. Shipment is F.O.B. Lexington, Massachusetts, via such carriers and to such destinations as may be designated by the customer. Boston will provide instrument transit cases.

SPECIAL HANDLING

August 6, 1962

Page 3

SPECIAL HANDLING

- c. Final acceptance of equipment and materials to be delivered shall be at Boston. SE and other Customer's representatives will be notified five (5) days prior to the beginning of final acceptance tests. These tests shall be administered in accordance with the approved Acceptance Test Procedures. Requests for waivers on end item equipment deliveries shall be submitted to SE/TD for resolution. The execution of a DD Form 250 by Itek, which may contain concurrence signatures of SE and other Customer's representatives, shall constitute final acceptance. Copies of the DD Forms 250 will be forwarded to the Contracting and Finance Officers.
 - d. All Qualification and Acceptance Test Specifications and Procedures (QTS/QTP and ATS/ATP) shall be prepared by the Contractor and the QTS and ATS shall be approved by SE/TD prior to the performance of the Qual or Acceptance Test, whichever is applicable.
- Item 9. Contractor shall furnish the following reports and attend required meetings as follows:
- a. Weekly TWX progress report - to be forwarded to SE/TD on Wednesdays and shall report significant highlights of development for the preceding week - ending Saturday.
 - b. Monthly TWX Financial Report - to be forwarded the 20th of each month for the preceding Boston accounting month.
 - c. Weight Report - to be forwarded every two (2) weeks to SE showing current weight estimate and first and second moments of inertia. Should the details of the report be unchanged, a TWX statement to that effect will be forwarded in lieu of the report.
 - d. System Qualification Test Report - to be forwarded to SE/TD two (2) weeks or sooner after completion of each major subassembly test phase. A consolidated, summarizing report shall be forwarded forty-five (45) days after the Subsystem Qualification Test Program.
 - e. Subassembly Qualification Test Reports - to be forwarded to SE/TD two (2) weeks or sooner after completion of each major subassembly test phase. A consolidated, summarizing report shall be forwarded forty-five (45) days after the Subsystem Qualification Test Program.
 - f. Acceptance Test Reports - to be forwarded as part of each subsystem logbook.
 - g. Post-flight Engineering Analysis Report - ten copies (10) to be forwarded to SE/TD upon completion of each analysis. LMSC will furnish Contractor with copies of all pertinent telemetering data obtained during flight for engineering analysis by contractor of camera subsystem performance.

SPECIAL HANDLING

SPECIAL HANDLING

August 6, 1962

Page 4

- h. Systems Engineering Meetings shall be held once each month alternately at Associate and Boston. Such meetings shall be chaired and minutes prepared and distributed by SE. Contractor shall present such briefing aids and data as required.

Item 10. Contractor shall furnish the following manuals and data:

- a. Provide GFP Class III Manuals for the Stellar/Index Subsystem and its support equipment modified as necessary.
- b. Provide twenty (20) copies of a Class III Manual of Operation and Service Instructions for the Panoramic Camera Subsystem.
- c. Provide twenty (20) copies of a Class III Manual of Operation and Service Instructions for Ground Support Equipment.

These manuals shall contain sufficient information to install, maintain, and operate the equipments and shall also contain such illustrations, safety notes, schematics, and drawings as are required. These manuals shall be in sufficient detail for the use of personnel operating research and development programs. Delivery shall be accomplished within forty-five (45) days after delivery of the first flight units.

- d. Provide SE (System Engineering) with documentation of each Panoramic and Stellar/Index Camera Subsystem consisting of:
 - 1. Panoramic Camera Subsystem Logbook.
 - 2. Calibration data.
 - 3. Pan Subsystem Electrical Schematics as wired (three each). These drawings may be red-lined.
 - 4. Results of Acceptance Tests.
 - 5. Revisions to Operation and Service Instructions Manual as required.
 - 6. Electrical Interface list per SP2-156.
 - 7. Results of 2:1 contrast photo tests.
 - 8. Stellar/Index Camera Subsystem documentation as furnished with each unit.

SPECIAL HANDLING

SPECIAL HANDLING

August 6, 1962

Page 5

- B. Delivery - Contractor shall deliver the work called for above in accordance with the following schedule: Unless otherwise specified, acceptance and inspection shall be at Contractor's plant or plants of shipment made F.O.B. Contractor's plant, Lexington, Massachusetts.

Item 1 -

- a. Panoramic Camera Subsystem, Five (5), (less supply spools)

Serial No. 11	22 March 1963
Serial No. 12	22 November 1962
Serial No. 13	22 December 1962
Serial No. 14	22 January 1963
Serial No. 15	22 February 1963

- b. Stell-Index Camera Subsystems, Five (5)

First Delivery	22 November 1962
Second Delivery	22 December 1962
Third Delivery	22 January 1963
Fourth Delivery	22 February 1963
Fifth Delivery	22 March 1963

Item 2 -

- a. Space Mock-Up, Pan Camera Subsystem - 21 June 1962

- b. Structural Test Model, Pan Camera Subsystem - 20 August 1962

Item 3 - Contractor shall deliver GHE and GSE as follows:

	<u>D</u>	<u>B</u>	<u>Date</u>
a. Modify 2 each GF (Gov't. Furnished) 2 Bay Checkout Consoles		2	9-15-62
b. Modify 2 each GF 3 Bay Checkout Consoles	1	1	11-16-62
c. Modify 2 each GF Instrumentation Consoles		2	11-26-62
d. Design & fabricate 2 each Instru- mentation Consoles	2		11-22-62 12-28-62
e. Design & fabricate 2 each 2 Bay Checkout Consoles	1	1	11-2-62 12-22-62
f. Design & fabricate 1 each 3 Bay Checkout Consoles	1		12-14-62
g. Design & fabricate 3 each Test and Integration Dollies	2	1	10-12-62 11-22-62 12-22-62

SPECIAL HANDLING

SPECIAL HANDLINGAUGUST 6, 1962
Page 6

	<u>D</u>	<u>B</u>	<u>Date</u>
h. Design & fabricate 1 each STM (Structural Test Model) dolly.	1		7-19-62
i. Design & fabricate 2 each interface templates.	2		8-3-62
j. Design & fabricate 5 each "Strong Backs"	5		Pan Concurrent
k. Design & fabricate 3 each Pan transit cases and recycle	3		Pan Concurrent
l. Fabricate 7 each Cassette transit cases	7		9-14-62 10-12-62 Pan Concurrent
m. Modify the design and supply 78 sets each film transit case spiders and protective flanges.	78		6 - August 6 - September 24 - October 12 - November 12 - December 12 - January 6 - February
n. Design & fabricate 3 sets vertical installation sling assemblies	1 2		9-14-62 10-15-62

Item 4 - Cassette Subassemblies, Panoramic, Two (2)

First Delivery
Second Delivery14 September 1962
12 October 1962

Item 5 - Film Supply Spools

One each per Pan Camera Subsystem plus additional quantities
per Integrated Spool/Film/Transit Case Plan.Item 6 - Field Engineering Services shall be furnished as required for the
period of performance of this Contract, contemplated to be through
31 August 1963.Item 7 - Spare parts shall be delivered in accordance with Item 7 of
Paragraph A of this Work Statement.Item 8 - Qualification, Inspection and Acceptance shall be performed in
accordance with Item 8 of Paragraph A of this Work Statement.Item 9 - Reports. Deliver in accordance with a. through h. of Item 9 of
Paragraph A of this Work Statement.Item 10 - Manuals and Data. Deliver in accordance with Item 10 of Paragraph A
of this Work Statement, provided that documentation in subparagraph d.
shall be furnished on or within 10 days of date of shipment of each
system.**SPECIAL HANDLING**

SPECIAL HANDLING

August 6, 1962

Page 7

C. Furnished Equipment

Item	Description	Delivery Date
1.	One (1) 300 inch Collimator	Forthwith
2.	Film and film transit cases as required for testing and checkouts	Per Plan
3.	Residual inventory from Contractor's terminated subcontract P. O. 28-607 with LMSC for the E-5 System. Evidence of this transfer of inventory will be accomplished as an amendment to this Contract BT-1943.	
4.	Stellar-Index Camera Subsystems, five (5) including Transit Cases, Supply Spools, and Class III Utility Manuals.	
	First Delivery	1 November 1962
	Second Delivery	1 December 1962
	Third Delivery	1 January 1963
	Fourth Delivery	1 February 1963
	Fifth Delivery	1 March 1963
5.	Stellar-Index Camera Subsystem Ground Handling and Test Equipment, three (3) sets - each set consists of a test and checkout console and a mount.	
	First Set	1 November 1962
	Second Set	15 November 1962
	Third Set	1 March 1963
6.	Clock Simulator, two (2)	
	First Delivery	30 June 1962
	Second Delivery	25 August 1962
7.	System outer skin, Fairing Subassembly, and adapter	15 September 1962
8.	S-I Cassettes, two (2)	
	First Delivery	17 August 1962
	Second Delivery	7 September 1962
9.	Actual Vehicle Power Supply, one (1)	1 September 1962

SPECIAL HANDLING